

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for reducing signaling load in a communication network having a plurality of switches, said the method comprising the steps of:

receiving a notification of a link failure at a first switch and a second switch adjacent to a link associated with said the link failure;

identifying a first plurality of circuits in a first direction affected by said the link failure by said the first switch and identifying a second plurality of circuits in a second direction affected by the link failure by the second switch, wherein each circuit of said the first plurality of circuits and the second plurality of circuits comprises a path of a plurality of links;

grouping affected circuits in accordance with one or more a first plurality of end-switches to which a first plurality of signaling messages have to be sent by said the first switch and a second plurality of end-switches to which a second plurality of signaling messages have to be sent by the second switch; and

bundling said the first plurality of signaling messages by said the first switch and the second plurality of signaling messages by the second switch; and

forwarding the first plurality of signaling messages that is bundled to one of the first plurality of end-switches by the first switch in the first direction away from the link failure and forwarding the second plurality of signaling messages that is bundled to one of the second plurality of end-switches by the second switch in the second direction away from the link failure.

2. (Canceled)

3. (Currently Amended) The method of claim [[2]] 1, wherein said the forwarding step forwards said-bundled the first plurality of signaling messages or the second plurality of signaling messages in at-least-one a signaling packet.

4. (Currently Amended) The method of claim ~~[[2]]~~ 1, wherein said the forwarding step forwards said-bundled the first plurality of signaling messages or the second plurality of signaling messages for circuits with a common end switch.

5. (Currently Amended) The method of claim 1, wherein said the first plurality of signaling messages and the second plurality of signaling messages are release messages.

6. (Canceled)

7. (Currently Amended) The method of claim 4, wherein said the forwarding step forwards said-bundled the first plurality of signaling messages or the second plurality of signaling messages for circuits with ~~[[a]]~~ the common end switch along a common path.

8. (Currently Amended) ~~An-apparatus~~ A system for reducing signaling load in a communication network having a plurality of switches, said the apparatus comprising:

a first switch comprising a first controller at-a-switch adjacent to a link associated with a link failure for receiving a notification of said the link failure, and for identifying a first plurality of circuits in a first direction affected by said the link failure, wherein each circuit of said the first plurality of circuits comprises a path of a plurality of links, and for grouping affected circuits in accordance with one-or more a first plurality of end-switches to which a first plurality of signaling messages have to be sent, and for bundling said the first plurality of signaling messages and forwarding the first plurality of signaling messages that are bundled to one of the first plurality of end-switches by the first switch in the first direction away from the link failure; and

a second switch comprising a second controller adjacent to the link associated with the link failure for receiving a notification of the link failure, and

for identifying a second plurality of circuits in a second direction affected by the link failure, wherein each circuit of the second plurality of circuits comprises a path of a plurality of links, and for grouping affected circuits in accordance with a second plurality of end-switches to which a second plurality of signaling messages have to be sent, for bundling the second plurality of signaling messages and forwarding the second plurality of signaling messages that are bundled to one of the second plurality of end-switches by the second switch in the second direction away from the link failure.

9. (Currently Amended) The apparatus system of claim 8, wherein said the first controller forwards said bundled the first plurality of signaling messages to one of said the first plurality of end-switches and the second controller forwards the second plurality of signaling messages to one of the second plurality of end-switches.

10. (Currently Amended) The apparatus system of claim 9, wherein said bundled the first plurality of signaling messages or the second plurality of signaling messages is are forwarded for circuits with a common end switch.

11. (Currently Amended) A non-transitory computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions which, when executed by a processor, cause the processor to perform a method the steps comprising of:

receiving a notification of a link failure at a first switch and a second switch adjacent to a link associated with said the link failure;

identifying a first plurality of circuits in a first direction affected by said the link failure by said the first switch and identifying a second plurality of circuits in a second direction affected by the link failure by the second switch, wherein each circuit of said the first plurality of circuits and the second plurality of circuits comprises a path of a plurality of links;

grouping affected circuits in accordance with ~~one or more~~ a first plurality of
end-switches to which a first plurality of signaling messages have to be sent by
said the first switch and a second plurality of end-switches to which a second
plurality of signaling messages have to be sent by the second switch; and

bundling said the first plurality of signaling messages by said the first
switch and the second plurality of signaling messages by the second switch; and

forwarding the first plurality of signaling messages that is bundled to one
of the first plurality of end-switches by the first switch in the first direction away
from the link failure and forwarding the second plurality of signaling messages
that is bundled to one of the second plurality of end-switches by the second
switch in the second direction away from the link failure.

Claims 12. – 25. (Canceled).